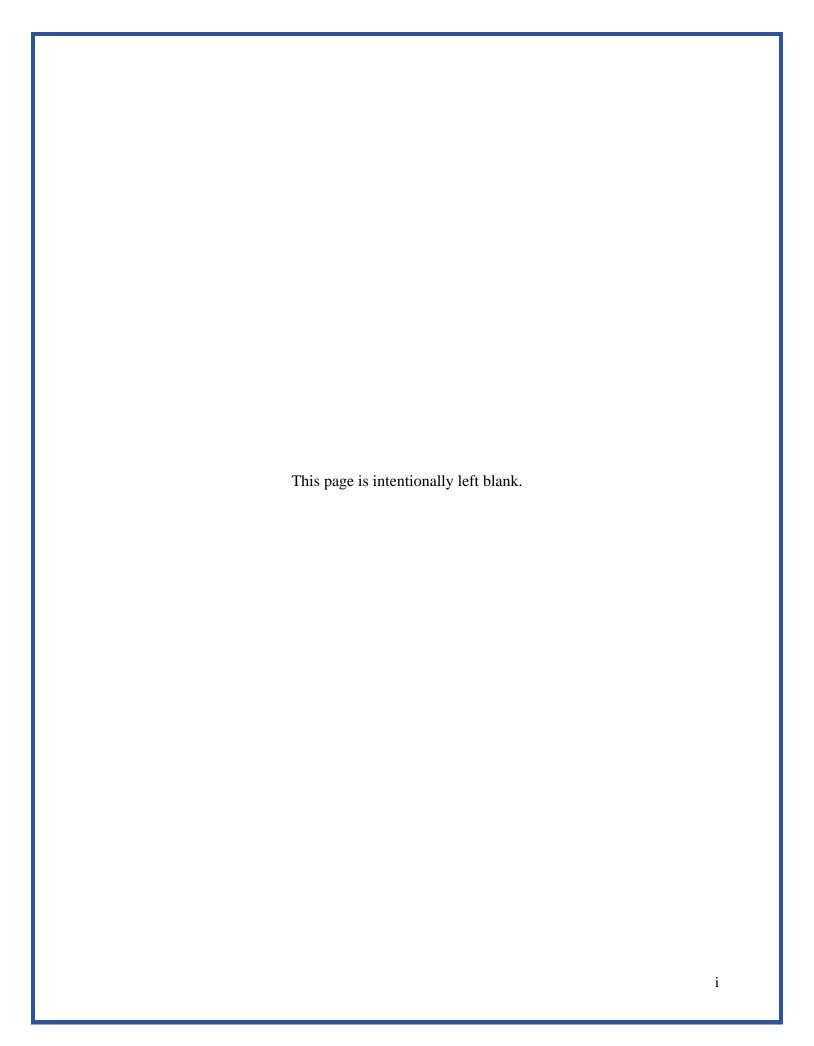
Multi-Jurisdictional Hazard Mitigation Plan: Alpine Fire Protection District Annex

San Diego County, California
2023



1. SECTION ONE: Determine the Planning Area and Resources

1.1. Planning Area: Alpine Fire Protection District

The Alpine Fire Protection District was founded in 1948, and officially originated on December 19, 1957. The District has one fire station staffed by 12 full time paid firefighters divided into three divisions who provide all risk emergency services, including advanced life support, fire suppression, fire prevention and countless support functions to the community. In 2006, the current state of the art modern facility was built on Tavern Road to replace the original fire station on Alpine Boulevard. The original station served Alpine for over 50 years, and the building is still in use by local merchants. The new station is designed to accommodate future additions of personnel and apparatus as we grow with the community.

The Alpine Fire Protection District is governed by an elected five member Board of Directors, who have fiduciary responsibility and establish policy through the Fire Chief. Fire District personnel include a Fire Chief, Division Chief, Fire Marshal, Finance Officer, three Fire Captains, three Engineers, six Firefighter/Paramedics, one part—time Fire Inspector and a part-time Administrative Assistant. Entry level recruits must be certified paramedics. Since the Paramedic Requirement has been implemented, we have increased our pool of certified Paramedics to 99% of our personnel on the fire engine. Within the next 5 years, we anticipate that number should increase to 100% through attrition. In 2021 our personnel responded to 1,723 emergency incidents in the District, which is a 13% increase in call volume over the last 5 years.

The Fire District maintains Mutual Aid Agreements with all fire agencies in San Diego County through the San Diego County Mutual Aid Agreement on file in the County Office of Emergency Services. Mutual Aid Agreements are also held with Viejas Fire Department (Viejas Tribal Government), State of California Governor's Office of Emergency Services, CalFire, U.S. Forest Service U.S. Fish and Wildlife Service, and San Diego County Fire. Automatic Aid agreements are maintained with agencies within the Central Zone, which includes the Cities of El Cajon, La Mesa, Lemon Grove, (Heartland Fire and Rescue) and Santee, in addition to the Fire Districts of Lakeside, San Miguel, Bonita-Sunnyside, and the Viejas, Barona, and Sycuan Tribal Fire Departments.

1.2 Community Rating System Requirements

The Community Rating System (CRS) is a FEMA program and rewards communities that go beyond the minimum standards for floodplain management under the National Flood Insurance Program (NFIP). Communities can potentially improve their Community Rating System and lower NFIP premiums by developing a CRS Plan.

For more information on the National Flood Insurance Program, see http://www.fema.gov/national-flood-insurance-program.

SECTION ONE | Determine the Planning Area and Resources

Community Rating System (CRS) Planning Steps	Local Mitigation Planning		
	Handbook Tasks		
	(44 CFR Part 201) Task 1: Determine the Planning Area and		
Step 1. Organize	Resources		
Stop It organize	Task 2: Build the Planning		
	Team 44 CFR 201.6(c)(1)		
	Task 3: Create an Outreach Strategy		
Step 2. Involve the public	44 CFR 201.6(b)(1)		
	Task 4: Review Community Capabilities		
Step 3. Coordinate	44 CFR 201.6(b)(2) & (3)		
Step 4. Assess the hazard	Task 5: Conduct a Risk		
	Assessment 44 CFR		
Step 5. Assess the problem	201.6(c)(2)(i)		
	44 CFR 201.6(c)(2)(ii) & (iii)		
Step 6. Set goals	Task 6: Develop a Mitigation		
Step 7. Review possible activities	Strategy 44 CFR 201.6(c)(3)(i)		
	44 CFR 201.6(c)(3)(ii) 44 CFR 201.6(c)(3)(iii)		
Step 8. Draft an action plan	44 CFR 201.0(C)(3)(III)		
	Task 8: Review and Adopt the Plan		
Step 9. Adopt the plan	44 CFR 201.6(c)(5)		
	Task 7: Keep the Plan Current		
Step 10. Implement, evaluate, revise	Task 9: Create a Safe and Resilient		
	Community 44 CFR 201.6(c)(4)		
	Community 44 CFR 201.6(c)(4)		

TABLE 1: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 1.1 DESCRIBES THE CRS REQUIREMENTS MET BY THE SAN DIEGO COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN.

Any jurisdiction or special district may participate in the hazard mitigation planning process. However, to request FEMA approval, each of the local jurisdictions must meet all requirements of 44 CFR §201.6. In addition to the requirement for participation in the process, the Federal regulation specifies the following requirements for multi-jurisdictional plans:

- The risk assessment must assess each jurisdiction's risk where they may vary from the risks facing the entire planning area. (44 CFR §201.6(c)(2)(iii))
- There must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. (44 CFR §201.6(c)(3)(iv))
- Each jurisdiction requesting approval of the plan must document that is has been formally adopted. (44 CFR §201.6(c)(5))

The hazard mitigation plan must clearly list the jurisdictions that participated in the plan and are seeking plan approval. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan and annexes meet all requirements.

2. SECTION TWO: Build the Planning Team

2.1. Planning Participants

Jason McBroom Fire Marshal – Primary

Brian Boggeln Fire Chief – CEO/CFO

2.2. Planning Process

A Hazard Mitigation Working Group (HMWG) was established to facilitate the development of the Plan. Representatives from each incorporated city, special district and the unincorporated county were designated by their jurisdiction as the HMWG member. Each HMWG member identified a Local Mitigation Planning Team for their jurisdiction that included decision-makers from police, fire, emergency services, community development/planning, transportation, economic development, public works and emergency response/services personnel, as appropriate. The jurisdiction-level Local Mitigation Planning Team assisted in identifying the specific hazards/risks that are of concern to each jurisdiction and to prioritize hazard mitigation measures. The HMWG members brought this information to HMWG meetings held regularly to provide jurisdiction-specific input to the multi-jurisdictional planning effort and to assure that all aspects of each jurisdiction's concerns were addressed. A list of the lead contacts for each participating jurisdiction is included in Section 3.2.

All HMWG members were provided an overview of hazard mitigation planning elements at the HMWG meetings. This training was designed after the FEMA State and Local Mitigation Planning How-to Guide worksheets, which led the HMWG members through the process of defining the jurisdiction's assets, vulnerabilities, capabilities, goals and objectives, and action items. The HMWG members were also given additional action items at each meeting to be completed by their Local Mitigation Planning Team. HMWG members also participated in the public workshops held to present the risk assessment, preliminary goals, objectives and actions. In addition, several HMWG members met with OES staff specifically to discuss hazard-related goals, objectives and actions. Preliminary goals, objectives and actions developed by jurisdiction staff were then reviewed with their respective City Council, City Manager and/or representatives for approval.

Throughout the planning process, the HMWG members were given maps of the profiled hazards as well as detailed jurisdiction-level maps that illustrated the profiled hazards and critical. These maps were created using the data sources listed in Appendix B. These data sources contain the most recent data available for the San Diego region. A very large portion of this data was supplied by the regional GIS agency, SanGIS. The SanGIS data is updated periodically with the new data being provided by the local agencies and jurisdictions. This ensured that the data used was the most recent available for each participating jurisdiction. The HMWG members reviewed these maps and provided updates or changes to the critical facility or hazard layers. Data received from HMWG members were added to the hazard database and used in the modeling process described in the Risk Assessment portion of the Plan (Section 4). The data

SECTION TWO | Build the Planning Team

used in this revision of the plan is considered to be more accurate that that utilized in the original plan. All 18 incorporated cities and participating special districts provided OES with edits to critical facilities within their jurisdictions.

See the San Diego County Multi-Jurisdictional Hazard Mitigation Plan's Section Two for details about the county-wide Planning Process.

The district's internal planning process involved delegating specific sections and the HMP Worksheets to team members best qualified to provide the information. It also involved reaching out to local jurisdictions such as the County of San Diego for jurisdictional plans like existing hazard mitigation strategies and zoning and development guidelines to reference in the district's annex.

3. SECTION THREE: Create an Outreach Strategy

The San Diego County Operational Area consists of the County of San Diego and the eighteen incorporated cities located within the county's borders. Planning for emergencies, training and exercises are all conducted on a regional basis. In 1961 the County and the cities formed a Joint Powers Agency (JPA) to facilitate regional planning, training, exercises, and responses. This JPA is known as the Unified San Diego County Emergency Services Organization (USDCESO). Its' governing body is the Unified Disaster Council (UDC). The membership of the UDC is defined in the JPA. Each city and the County have one representative. Representatives from the cities can be an elected official, the City Manager or from the municipal law enforcement or fire agency. The County is represented by the Chairperson of the County Board of Supervisors, who also serves as Chair of the UDC.

In addition, there are 26 fire protection districts and 17 water districts within the San Diego Region. Each was offered the opportunity to participate in the development of this plan.

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities and must be included in a hazard mitigation plan by the planning team.

The planning team also may identify additional types of capabilities relevant to mitigation planning.

4.1. Capability Assessment

The primary types of capabilities for reducing long-term vulnerability through mitigation planning are:

- Planning and regulatory
- Administrative and technical
- Financial
- Education and outreach

4.1.1. Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Please indicate which of the following your jurisdiction has in place:

	Yes/No	Does the plan address hazards?
Plans	Year	Does the plan identify projects to include in the mitigation strategy?
		Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	NO	
Capital Improvements Plan		
Economic Development Plan	NO	
Local Emergency Operations Plan	NO	
Continuity of Operations Plan	YES	EOC LOCATED IN OUR EOC ROOM
Transportation Plan	NO	
Stormwater Management Plan	NO	PART OF THE COUNTY GENERAL PLAN
Community Wildfire Protection Plan	YES	2020
M. Real estate disclosure requirements	NO	
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	NO	NNING HANDROOK WORKSHEET A I DATA

TABLE 2: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?	
Building Code	YES	Version/Year: 2019 California Building Code	
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score: County of San Diego Policy	
Fire department ISO rating	YES	Rating: 2/2Y	
Site plan review requirements	YES	2020-01 Local Ordinance	
		Is the ordinance an effective measure for reducing hazard impacts?	
Land Use Planning and Ordinances	Yes/No	Is the ordinance adequately administered and enforced?	
Zoning ordinance		The county of San Diego PDS oversees this. We are partners with PDS. Zoning restrictions do limit and reduce potential hazards. The ordinance Is adequately administered and enforced.	
Subdivision ordinance		The county of San Diego PDS oversees this. We are partners with PDS. Zoning restrictions do limit and reduce potential hazards. The ordinance Is adequately administered and enforced.	
Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	YES	The county of San Diego PDS oversees this. We are partners with Zoning restrictions do limit and reduce potential hazards. The ordills adequately administered and enforced. Furthermore, the County DPLU oversees areas that are able to be developed and oversee all Environmental concerns and easements.	
Growth management ordinances (also called "smart growth" or anti-sprawl programs)	NO		
Flood insurance rate maps	YES	County has this and oversees and enforces 100 year and 500-year flood Zones.	
Acquisition of land for open space and public recreation uses		Tier 1, 2 and 3 offset mitigation ordinances are in place. Developers Do have to mitigate for future development within the county.	
Other	NO		

How can these capabilities be expanded and improved to reduce risk?

WE OPERATE UNDER THE SAN DIEGO COUNTY STANDARDS AND CONSOLIDATED CODE

4.1.2. Administrative and Technical

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. For smaller jurisdictions without local staff resources, if there are public resources at the next higher-level government that can provide technical assistance, indicate so in your comments:

Administration	Yes/No	Describe capability
		Is coordination effective?
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Alpine Planning Group
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	NO	County of San Diego
Planners or Engineer(s) with an understanding of natural and/or manmade hazards	NO	County of San Diego
Mitigation Planning Committee	YES	I work with the planners at the County in discussion of all future projects
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	YES	Greater Alpine Fire Safe Council
Mutual aid agreements	YES	Heartland Fire & Tribal agreements. Auto aid with Cal Fire
Staff	Yes/No FT/PT1	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official	NO	County of San Diego handles
Floodplain Administrator	NO	County of San Diego handles
Emergency Manager	NO	County of San Diego handles
Surveyors	NO	
Staff with education or expertise to assess the community's vulnerability to hazards	YES FT	In house computer modeling and Wildfire Mitigation Managers

Community Planner	NO	County of San Diego handles
Scientists familiar with the hazards of the community	NO	
Civil Engineer	NO	
Personnel skilled in GIS and/or HAZUS	YES	Fire Chief
Grant writers	YES	In house
Other		
Technical	Yes/No	Dogoviho conchility
Technical	i es/ino	Describe capability
Technical	1 es/No	Has capability been used to assess/mitigate risk in the past?
Warning systems/services (Reverse 911, outdoor warning signals)	YES	Has capability been used to assess/mitigate risk
Warning systems/services		Has capability been used to assess/mitigate risk in the past? San Diego County Sheriff, Reverse 911, SD Alert, WEA
Warning systems/services (Reverse 911, outdoor warning signals)	YES	Has capability been used to assess/mitigate risk in the past? San Diego County Sheriff, Reverse 911, SD Alert, WEA alerting
Warning systems/services (Reverse 911, outdoor warning signals) Hazard data and information	YES	Has capability been used to assess/mitigate risk in the past? San Diego County Sheriff, Reverse 911, SD Alert, WEA alerting Heartland Communications / In house reports

TABLE 3: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.3. Financial

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation:

Funding Resource	Access/ Eligibility (Yes/No)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Community Development Block Grants (CDBG)	NO	
Capital improvements project funding	YES	Various reserve accounts
Authority to levy taxes for specific purposes	YES	With voter approval 2/3 majority vote
Fees for water, sewer, gas, or electric service	NO	
Impact fees for homebuyers or developers for new developments/homes	YES	County of San Diego DIF
Incur debt through general obligation bonds	NO	
Incur debt through special tax and revenue bonds	NO	
Incur debt through private activity bonds	NO	
Community Development Block Grants (CDBG)	NO	
Capital improvements project funding		
Authority to levy taxes for specific purposes		

TABLE 4: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.4. Education and Outreach

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information:

		Describe program/organization and how relates to disaster resilience and mitigation.
Program/Organization	Yes/No	Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	YES	Greater Alpine Fire Safe Council Sunrise Powerlink Fire Mitigation Grants Firewise USA
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	YES	On an as needed basis asked from schools and provide education to the general public
Natural disaster or safety related school programs	YES	Actively participate in drills
StormReady certification	NO	
Firewise Communities certification	YES	As of July 2021
Public-private partnership initiatives addressing disaster-related issues	YES	Shake out, Wildfire preparedness days SDGE sponsors this
Other		

TABLE 5: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.2. Safe Growth Audit

Identify gaps in your community's growth guidance instruments and improvements that could be made to reduce vulnerability to future development:

Comprehensive Plan	Yes	No
Land Use		
1. Does the future land-use map clearly identify natural hazard areas?	X	
2. Do the land-use policies discourage development or redevelopment within natural hazard areas?	X	
3. Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?	X	
Transportation		
1. Does the transportation plan limit access to hazard areas?	X	
2. Is transportation policy used to guide growth to safe locations?	X	
3. Are movement systems designed to function under disaster conditions (e.g., evacuation)?	X	

TABLE 6: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA.

Comprehensive Plan (continued)	Yes	No
Environmental Management		
1. Are environmental systems that protect development from hazards identified and mapped?	X	
2. Do environmental policies maintain and restore protective ecosystems?	X	
3. Do environmental policies provide incentives to development that is located outside protective ecosystems?	X	
Public Safety		
1. Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?	X	
2. Is safety explicitly included in the plan's growth and development policies?	X	
3. Does the monitoring and implementation section of the plan cover safe growth objectives? TABLE 7: FEMALOCAL MITIGATION PLANNING HANDROOK WORKSHEET 42 DATA CO.	X	

TABLE 7: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Zoning Ordinance	Yes	No
1. Does the zoning ordinance conform to the comprehensive plan in terms of discouraging development or redevelopment within natural hazard areas?	X	
2. Does the ordinance contain natural hazard overlay zones that set conditions for land use within such zones?	X	
3. Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?	X	
4. Does the ordinance prohibit development within, or filling of, wetlands, floodways, and floodplains?	X	
Subdivision Regulations	Yes	No
1. Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?	X	
2. Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources?	X	
3. Do the regulations allow density transfers where hazard areas exist?	X	

TABLE 8: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Capital Improvement Program and Infrastructure Policies	Yes	No
1. Does the capital improvement program limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?	X	
2. Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?	X	
3. Does the capital improvement program provide funding for hazard mitigation projects identified in the FEMA Mitigation Plan?	X	
Other	Yes	No
1. Do small area or corridor plans recognize the need to avoid or mitigation natural hazards?	X	
2. Does the building code contain provisions to strengthen or elevate construction to withstand hazard forces?	X	
3. Do economic development or redevelopment strategies include provisions for mitigation natural hazards?	X	
4. Is there an adopted evacuation and shelter plan to deal with emergencies from natural hazards?	X	

TABLE 9: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Questions were adapted from Godschalk, David R. Practice Safe Growth Audits, Zoning Practice, Issue Number 10, October 2009, American Planning Association.

4.2.1 Development since 2018 Plan

Development Services tracked total building permits issued since the 2018 plan. A summary of this development within the very high fire hazard severity zone is shown in the table below. Increased development within the wildland urban interface creates and modifies defensible space zones surrounding residential and commercial areas. With the exception of more people living in the District area potentially exposed to wildfire, these changes in development should not cause a significant increase in vulnerability.

Property Use	2018	2019	2020	2021
Residential	59	36	34	52
Commercial	5	7	3	6
Total	64	43	37	58

Source: Alpine Fire Protection District internal tracking system.

4.3. National Flood Insurance Program (NFIP)

As a participant in the National Flood Insurance Program (NFIP), a community develops capabilities for conducting flood mitigation activities. The hazard mitigation plan must describe each jurisdiction's participation in the NFIP. Participating communities must describe their continued compliance with NFIP requirements. The mitigation plan must do more than state that the community will continue to comply with the NFIP. Each jurisdiction must describe their floodplain management program and address how they will continue to comply with the NFIP requirements. The local floodplain administrator is often the primary source for this information.

Jurisdictions where FEMA has issued a floodplain map but are currently not participating in the NFIP may meet this requirement by describing the reasons why the community does not participate. Plan updates must meet the same requirements and document any change in floodplain management programs.

NFIP Topic	Source of Information	Comments
Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	06073c1685g 06073c1725g
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?		
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	
Staff Resources		
Is the Community FPA or NFIP Coordinator certified?	Community FPA	
Is floodplain management an auxiliary function?	Community FPA	
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	

Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	
Are there any outstanding compliance issues (i.e., current violations)?		
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		
Is a CAV or CAC scheduled or needed?		
Alpine Fire Protection being a "special district" is not eligible for NFIP. All info is found under County of San Diego.		

TABLE 10: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA.

NFIP Topic	Source of Information	Comments
Regulation		
When did the community enter the NFIP?	Community Status Book http://www.fema.gov/ national-flood-insurance- program/national-flood- insurance-program- community-status-book	Identified- 7-19-1977 Mapped- 6-15-1984 #060284 County of San Diego
Are the FIRMs digital or paper?	Community FPA	
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Yes recorded with County. In 8/2007 County of San Diego completed a FMP
Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP Flood Insurance Manual http://www.fema.gov/ flood-insurance-manual Community FPA, FEMA CRS Coordinator, ISO representative	
Community Rating System (CRS)		
Does the community participate in CRS?	Community FPA, State, FEMA NFIP	Community CRS
What is the community's CRS Class Ranking?	Flood Insurance Manual http://www.fema.gov/flood-insurance-manual	County ranking Class 6 as of 2012
What categories and activities provide CRS points and how can the class be improved?		2012 Updated CRS
Does the plan include CRS planning requirements	Community FPA, FEMA CRS Coordinator, ISO representative	HazMit Plan

TABLE 11: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA CONTINUED.

The planning team conducts a risk assessment to determine the potential impacts of hazards to the people, economy, and built and natural environments of the community. The risk assessment provides the foundation for the rest of the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards.

In addition to informing the mitigation strategy, the risk assessment also can be used to establish emergency preparedness and response priorities, for land use and comprehensive planning, and for decision making by elected officials, city and county departments, businesses, and organizations in the community.

5.1. Hazards Summary

The list of high priority hazards was determined by the Local Hazard Mitigation Planning Team using jurisdictional-level hazard maps and data, historical records, vulnerability assessments, and input from subject matter experts. Due to the potential level of moderate ground shaking intensity and less ground motion from hard soil conditions, earthquake was ranked as a medium hazard.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Avalanche	Negligible	None	0	None
Dam Failure	Negligible	None	0	None
Drought	extensive	Extreme	1-5 years	High
Earthquake	extensive	8.0+	Annually	Medium
Erosion	extensive	50%	1-5 years	Low
Expansive Soils	Negligible	None	0	None
Extreme Cold	Negligible	None	0	None
Extreme Heat	extensive	50%	Annually	High
Flood	Limited	25%	1-5 years	Low
Hail	extensive	90%	100%	Low
Hurricane	Negligible	None	0	None
Landslide	Negligible	None	0	None

Lightning	Limited	90%	1-5 years	Low
Sea Level Rise	Negligible	None	0	None
Severe Wind	extensive	50%	Annually	Low
Severe Winter Weather	extensive	5%	1-5 years	Low
Storm Surge	Negligible	None	0	None
Subsidence	Negligible	None	0	None
Tornado	Negligible	None	0	None
Tsunami	Negligible	None	0	None
Wildfire	extensive	Extreme	Annually	High

TABLE 12; FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Definitions for Classifications

Location (Geographic Area Affected)

- Negligible: Less than 10 percent of planning area or isolated single-point occurrences
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences
- Extensive: 75 to 100 percent of planning area or consistent single-point occurrences

Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- Weak: Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months
- Extreme: Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions

Hazard	Scale / Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index3	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
	Modified Mercalli Scale4	I to IV	V to VII	VII	IX to XII
Earthquake	Richter Magnitude5	2, 3	4, 5	6	7, 8
	Saffir-Simpson Hurricane Wind Scale6	1	2	3	4, 5

Tornad	o Fujita Tornado Da	nmage Scale7 F0	F1, F2	F3	F4, F5	

Probability of Future Events

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- Occasional: 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Overall Significance

- **Low:** Two or more criteria fall in lower classifications, or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.
- O Cumulative meteorological drought and wet conditions: http://ncdc.noaa.gov/
- o Earthquake intensity and effect on population and structures: http://earthquake.usgs.gov
- o Earthquake magnitude as a logarithmic scale, measured by a seismograph: http://earthquake.usgs.gov
- Hurricane rating based on sustained wind speed: http://nhc.noaa.gov
- o Tornado rating based on wind speed and associated damage: http://spc.noaa.gov

5.2 Potential Hazard Exposure and Loss Estimates

The Alpine Fire Protection District reviewed a set of jurisdictional-level hazard maps and data provided by the County of San Diego, including detailed critical facility information and localized potential hazard exposure/loss estimates related to residential, commercial, and critical asset/facilities to identify the top hazards threatening their Alpine Fire Protection District. Potential hazard exposure/loss estimates are summarized in Table 5.

- Since special districts are not part of NFIP alone Alpine Fire numbers have been accounted for in the County of San Diego numbers.
- Alpine Fire has the range of hazards ranked from Wildfire being the highest to flooding. All parcels located in the Alpine Fire Protection District area is mapped as a Very High risk against wildfire. Combined with long term drought and reduced rainfall the landscape is at higher-than-normal risks. Seasonal winds occurring in late fall (Santa Ana winds) would carry a wildfire at a critical rate of spread. The potential for catastrophic loss is present. Wildfires in the open areas and roadside starts along the freeway pose the highest

SEC	CTION FIVE Conduct a Risk Assessment
	risk and most cause for mitigation. Education to the local areas and engineering wildfire mitigation strategies are paramount. This item ranks the highest.

TABLE 5: SUMMARY OF POTENTIAL HAZARD-RELATED EXPOSURE/LOSS IN ALPINE FIRE PROTECTION DISTRICT

		Reside	ential	Comm	ercial	Critical Facilities		
Hazard Type	Exposed Population	Number of Residential Buildings	Potential Exposure Loss for Residential Buildings	Number of Commercial Buildings	Potential Exposure Loss for Commercial Buildings	Number of Critical Facilities	Potential Exposure for Critical Facilities	
Coastal Storm	0	0	0	0	0	0	0	
Sea Level Rise								
Coastal Flooding	0	0	0	0	0	0	0	
Mean Higher High Water	0	0	0	0	0	0	0	
Dam Failure	0	0	0	0	0	0	0	
Earthquake (Loss)								
(Annualized Loss - Includes shaking, liquefaction and landslide components)	0	0	0	0	0	1	1	
100 Year	0	0	0	0	0	1	1	
500 Year	0	0	0	0	0	1	1	
Floods (Loss)					1		l	
100 Year	268	23	23	1	1	1	1	
500 Year	268	23	23	1	1	1	1	
Rain-Induced Landslide								
High Risk	292	2	2	1	1	1	1	
Moderate Risk	0	0	0	0	0	0	0	
Tsunami	0	0	0	0	0	0	0	
Wildfire/Structure Fire							<u> </u>	
High Fire Hazard	0	0	0	0	0	0	0	
Very High Fire Hazard	17747	4961	4961	102	102	34	34	

TABLE 5: INVENTORY EXPOSURE FOR INFRASTRUCTURE ALPINE FIRE PROTECTION DISTRICT

Hazard Type	Data	HWY	OIL GAS	RR	TOTAL
Coastal Storm	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Sea Level Rise					
Coastal Flooding	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Mean Higher High Water	Total KMs	0	0	0	0
High water	Exposure (x\$1,000)	0	0	0	0
Dam Failure	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Earthquake (Loss					
	Total KMs	.918		0	.918
Annualized	Exposure (x\$1,000)	918			
100 Year	Total KMs	.918	3.32	0	4.238
	Exposure (x\$1,000)	918	3320	0	4238
500 Year	Number	.918	3.32	0	4.238
	Exposure (x\$1,000)	918	3320	0	4238
Flood (Loss)					
100 Year	Total KMs	.30	0	0	.30
	Exposure (x\$1,000)	300	0	0	300
500 Year	Total KMs	.30	0	0	.30
	Exposure (x\$1,000)	300	0	0	300
Rain-Induced Lan			,		T.
High Risk	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Moderate Risk	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Tsunami	Total KMs	0	0	0	0
	Exposure (x\$1,000)	0	0	0	0
Wildfire/Structure					
	Total KMs	0	0	0	0
High Fire Hazard	Exposure (x\$1,000)	0	0	0	0

TABLE 5. INVENTORY EXPOSURE FOR INFRASTRUCTURE ALPINE FIRE PROTECTION DISTRICT

Very High Fire	Total KMs	65.218	3.32	0	68.538
Hazard	Exposure (x1000)	65218	3320	0	68538
Total Number		68.572	9.96	0	78.532
Total Exposure (x \$1,000)		\$68,572	\$9,960		\$78,532

6. SECTION SIX: Develop a Mitigation Strategy

The mitigation strategy serves as the long-term blueprint for reducing potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process.

The mitigation strategy is made up of three main required components: mitigation goals, mitigation actions, and an action plan for implementation. These provide the framework to identify, prioritize, and implement actions to reduce risk to hazards.

Mitigation goals are general guidelines that explain what the community wants to achieve with the plan They are usually broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.

Mitigation actions are specific projects and activities that help achieve the goals.

The action plan describes how the mitigation actions will be implemented, including how those actions will be prioritized, administered, and incorporated into the community's existing planning mechanisms. In a multi-jurisdictional plan, each jurisdiction must have an action plan specific to that jurisdiction and its vulnerabilities.

Although not required, some communities choose to develop **objectives** to help define or organize mitigation actions. Objectives are broader than specific actions, but are measurable, unlike goals. Objectives connect goals with the actual mitigation actions.

6.1. Mitigation Action Evaluation

Use this worksheet to help evaluate and prioritize each mitigation action being considered by the planning team. For each action, evaluate the potential benefits and/or likelihood of successful implementation for the criteria defined below.

Rank each of the criteria with a -1, 0 or 1 using the following scale:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

Example Evaluation Criteria:

- **Life Safety** How effective will the action be at protecting lives and preventing injuries?
- **Property Protection** How significant will the action be at eliminating or reducing damage to structures and infrastructure?
- **Technical** Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.

- **Political** Is there overall public support for the mitigation action? Is there the political will to support it?
- **Legal** Does the community have the authority to implement the action?
- **Environmental** What are the potential environmental impacts of the action? Will it comply with environmental regulations?
- **Social** Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?
- **Administrative** Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
- **Local Champion** Is there a strong advocate for the action or project among local departments and agencies that will support the action's implementation?
- Other Community Objectives Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of the comprehensive plan?

Mitigation Action	Life Safety	Property Protection	Technical	Political	Legal	Environ mental	Social		Local Champion	Other Community Objectives	Total Score
	Local Plans and Regulations: Goal 1 Reduce the possibility of damage and losses to existing assets, including people, critical acilities / infrastructure and public facilities due to wildfire.										
Action 1.A.1	1	1	0	0	1	1	1	1	1	1	8
Create strategic placed fuel breaks											
Structure and Infrastruc	cture Proj	ects								l	
Action 1.A.1	1	1	1	1	1	1	1	1	1	1	10
Create strategic placed fuel breaks											
Natural Systems Protec	tion										
Action 1.A.1	1	1	1	1	1	1	0	1	1	1	9
Create strategic placed fuel breaks											
Education and Awaren	ess Progr	ams									•
Action 1.A.1	1	1	1	0	0	1	1	1	1	1	8
Create strategic placed fuel breaks											

Mitigation Action: Objective 1.B Weed Abatement/ Brush Management/ Fuel Mod in egress corridors	Life Safety	Property Protection	Technical	Political	Legal	Environmen tal	Social	Administrati ve	Local Champion	Other Commu nity Objectiv es	Total Score
Local Plans and Regulation public facilities due to wild		Reduce the	possibility of	of damage a	nd losses	to existing ass	sets, includ	ling people, cr	itical facilitie	s / infrastrud	cture and
Action 1.B.1 Put to use the MOU between US Fish and Wildlife Service, Ca Dept Fish & Game, Cal Fire and local authority	1	1	-1	0	0	0	1	1	1	1	5
Action 1.B.2 – Clear brush to no higher than 6" in height all egress pathways.	1	1	1	1	0	0	0	1	1	1	7
Action 1.B.3 – Clear brush along roadways 20' to 30'.	1	1	1	1	0	0	0	1	1	1	7
			S	Structure and	Infrastruc	cture Projects					
Action 1.B.1 Put to use the MOU between US Fish and Wildlife Service, Ca Dept Fish & Game, Cal Fire and local authority	1	1	1	1	1	1	1	1	1	1	10
Action 1.B.2 – Clear brush to no higher than 6" in height all egress pathways.	1	1	1	1	1	1	1	1	1	1	10
Action 1.B.3 – Clear brush along roadways 20' to 30'.	1	1	1	1	1	1	1	1	1	1	10
				Natural S	Systems P	rotection					
Action 1.B.1 Put to use the MOU between US Fish and Wildlife Service, Ca Dept Fish & Game, Cal Fire and local authority	1	1	1	0	0	0	1	1	1	1	7
Action 1.B.2 – Clear brush to no higher than 6" in height all egress pathways.	1	1	1	0	0	0	1	1	1	1	7
Action 1.B.3 – Clear brush along roadways 20' to 30'.	1	1	1	0	0	0	1	1	1	1	7
Education and Awareness Programs											
Action 1.B.1 Put to use the MOU between US Fish and Wildlife Service, Ca Dept Fish & Game, Cal Fire and local authority	1	1	1	1	1	1	1	1	1	1	10
Action 1.B.2 – Clear brush to no higher than 6" in height all egress pathways.	1	1	1	1	1	1	1	1	1	1	10
Action 1.B.3 – Clear brush along roadways 20' to 30'.	1	1	1	1	1	1	1	1	1	1	10

Mitigation Action: Objective 1.C.1 Improve ISO Classification from 2 to	Life Safety	Propert y Protecti on	Technic al	Political	Legal	Environme ntal	Social	Administra tive	Local Champion	Other Communit Y Objectives	Total Score
Local Plans and Regula public facilities due to w		1 1 Reduce	the possibil	ity of dama	ge and los	sses to existin	ng assets,	including peo	ple, critical faci	lities / infrastruc	cture and
Action 1.C.1 Improve current ISO Classification from a Class 2 to Class 1	1	1	1	1	1	1	1	1	1	1	10
Action 1.C.2 Complete current Deployment Analysis	1	1	1	1	0	0	0	1	1	1	7
Action 1.C.3 Improve overall fire hydrant annual inspection program	1	1	1	1	1	1	1	1	1	1	10
	Structure and Infrastructure Projects										
Action 1.C.1 Improve current ISO Classification from a Class 2 to Class 1	1	1	1	1	1	1	1	1	1	1	10
Action 1.C.2 Complete current Deployment Analysis	1	1	1	1	1	1	1	1	1	1	10
Action 1.C.3 Improve overall fire hydrant annual inspection program	1	1	1	1	1	1	1	1	1	1	10
				Natu	ıral Syste	ms Protection	1				
Action 1.C.1 Improve current ISO Classification from a Class 2 to Class 1	1	1	1	0	0	0	1	1	1	1	7
Action 1.C.2 Complete current Deployment Analysis	1	1	1	0	0	0	1	1	1	1	7
Action 1.C.3 Improve overall fire hydrant annual inspection program	1	1	1	0	0	0	1	1	1	1	7
Education and Awareness Programs											
Action 1.C.1 Improve current ISO Classification from a Class 2 to Class 1	1	1	1	1	1	1	1	1	1	1	10
Action 1.C.2 Complete current Deployment Analysis	1	1	1	1	1	1	1	1	1	1	10
Action 1.C.3 Improve overall fire hydrant annual inspection program	1	1	1	1	1	1	1	1	1	1	10

Mitigation Action: Objective 2.A provide emergency power supplies to relocation centers	Life Safety	Propert Y Protectio n	Technica I	Political	Legal	Environme ntal	Social	Administrat ive	Loc al Cham pion	Other Commun ity Objectiv es	Total Score
Local Plans and Regulati			e possibility	of damage	and losse	s to existing a	ssets, incl	uding people,	critical faci	lities/infrastru	cture and
public facilities due to ext Action 2.A.1 Provide emergency power supplies to evacuation centers having means to house persons in times of extreme heat or cold or fire	reme weath	1	-1	0	0	1	1	1	1	1	6
Action 2.A.2 Provide emergency power supplies to evacuation center having means to house several thousand residents as part of an evacuation or emergency.	1	1	-1	0	0	1	1	1	1	1	6
			S	Structure and	d Infrastruc	cture Projects					
Action 2.A.1 Provide emergency power supplies to evacuation centers having means to house persons in times of extreme heat or cold or fire	1	1	1	1	1	1	1	1	1	1	10
Action 2.A.2 Provide emergency power supplies to evacuation center having means to house several thousand residents as part of an evacuation or emergency.	1	1	1	1	1	1	1	1	1	1	10
				Natural S	Systems P	rotection					
Action 2.A.1 Provide emergency power supplies to evacuation centers having means to house persons in times of extreme heat or cold or fire	1	1	1	0	0	0	1	1	1	1	7
Action 2.A.2 Provide emergency power supplies to evacuation center having means to house several thousand residents as part of an evacuation or emergency.	1	1	1	0	0	0	1	1	1	1	7
			E	ducation an	d Awarene	ess Programs					
Action 2.A.1 Provide emergency power supplies to evacuation centers having means to house persons in times of extreme heat or cold or fire	1	1	1	1	1	1	1	1	1	1	10
Action 2.A.2 Provide emergency power supplies to evacuation center having means to house several thousand residents as part of an evacuation or emergency.	1	1	1	1	1	1	1	1	1	1	10

Mitigation Action: Objective 2.B Clear watershed to decrease chances for waterways to back up			Technic al the possibili	Political ty of damag	Legal e and loss	Environme ntal	Social assets, in	Administra tive cluding people	Local Champion	Other Commu nity Objectiv es	Total Score
public facilities due to ex	treme weath										
Action 2.B.1 Clear all streams, rivers, waterways, culverts and natural run off areas free and clear of debris all season long.	1	1	1	0	1	1	1	1	1	1	9
	Structure and Infrastructure Projects										
Action 2.B.1 Clear all streams, rivers, waterways, culverts and natural run off areas free and clear of debris all season long.	1	1	1	0	0	1	0	0	1	1	6
				Natural	Systems	Protection					
Action 2.B.1 Clear all streams, rivers, waterways, culverts and natural run off areas free and clear of debris all season long.	1	1	1	1	1	1	0	0	1	0	7
Education and Awareness Programs											
Action 2.B.1 Clear all streams, rivers, waterways, culverts and natural run off areas free and clear of debris all season long.	0	1	0	0	0	1	1	1	1	1	6

TABLE 13: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

6.2. Mitigation Action Implementation

A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process. For more information on potential funding sources and grants for mitigation actions, please see the County of San Diego Multi-jurisdictional Hazard Mitigation Base Plan, Section 6.2. This annex details the following mitigation action implementations:

Mitigation Action Implementation Worksheet

Complete a mitigation action implementation worksheet for each identified mitigation action.

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 1A1 Create fuel breaks in district
Background/Issue:	To be active in the slowing down of the forward rate of spread of wildland fires Alpine Fire partners with local agencies in creating and maintaining fuel breaks in strategic locations. High risk communities and neighboring governmental agencies partner in locating the fuel breaks.
Ideas for Integration:	Participating in the CWPP and Ca Fire Coalition to establish and maintain local fuel breaks that help to buffer communities at risk of open space and natural fuel. Partnering with USFS and Cal Fire to identify best served fuel breaks.
Responsible Agency:	AFPD
Partners:	AFPD, GAFSC, Firewise, Cal Fire, USFS
Potential Funding:	Sunrise Powerlink fire mitigation grants
Cost Estimate:	\$150,000.00 - \$300,000.00 annually
Benefits: (Losses Avoided)	Major loss to track homes adjacent to WUI open space areas
Timeline:	This is an ongoing scope of work. Once a fuel break has been cut maintenance is then continued.
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal
Jurisdiction:	Alpine Fire Protection District

Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 1B1 Weed abatement brush management
Background/Issue:	There are different methods of hazards fuels reduction and proper clearances to be maintained. This topic of concern is to perform as needed hazardous fuel identification and abatement of certain fuels. Defensible space occurring around structures, edges of fire department access roads, open space and fuel breaks. Connecting all of these to strengthen the resilience against wildfires.
Ideas for Integration:	Alpine Fire operates a strict defensible space enforcement policy and inspection program. We use local fire safe council to help educate homeowners on creating defensible space. Free roadside chipping and pop ups during the year to help promote public awareness.
Responsible Agency:	AFPD
Partners:	Cal Fire , USFS, GAFSC, BCLT,
Potential Funding:	Sunrise Powerlink Fire Mitigation Grants, local support donations.
Cost Estimate:	Roadside chipping - \$150,000.00 Defensible Space Assistance Grants to those financially unable to pay for their own works
Benefits: (Losses Avoided)	Building a more resilient community. Connecting the links of a chain to promote public awareness through education. Communicating with homeowners and engineering strategies on how to properly maintain clearances
Timeline:	This is an ongoing performance. Roadside chipping occurs on a cycle based on zones.
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 1B2 Brushing along egress corridors 20' & 30'
Background/Issue:	County of San Diego has identified certain major means of egress throughout the county. Alpine has four major means of evacuation corridors. All other fire department access roads are considered to be feeders to the arterial corridors. Hazardous fuels reduction along these major evacuation routes will assist in evacuation of community and ingress for first responders.
Ideas for Integration:	Work with County staff in maintaining brushing along road edges. County will maintain their right of way. After that public education and engineering a plan on how to mitigate the balance to achieve proper clearances along fire department access roads. Focusing on major means of egress arterial roads.
Responsible Agency:	Alpine Fire
Partners:	County Department of Roads, Cal Trans highway
Potential Funding:	County General funds for their share, local support in kind partners and SPFMG grants
Cost Estimate:	\$50,000 - \$100,000
Benefits: (Losses Avoided)	Improper fuels reduction along the roadways could lead to entrapment of communities attempting to evacuate. Loss of life is highly possible.
Timeline:	Ongoing as weeds and brush continue to grow
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 1C1 Increasing defensible space zones on south slopes from 100' – 150'
Background/Issue:	Alpine is a mountainous terrain area. There are existing homes on top of slopes and mid slope constructed. These homes are higher level of threat due to slope, aspect and location. Dense overgrowth leads to higher flame length and potential for direct flame impingement against structure
Ideas for Integration:	Identify those homes at high risk. Aspect, slope, terrain, access roads, and topography are factored in evaluating those homes defensible space zones. Current codes requires maintenance of 100' to buildings. Case by case base to evaluate each home with factors above and extend zone to include up to 150' clearance
Responsible Agency:	Alpine Fire
Partners:	Cal Fire, USFS, County DPLU
Potential Funding:	SPFMG, homeowners own financial support
Cost Estimate:	Ranges from case to case. Average costs per household ranges \$1500-\$4000.00
Benefits: (Losses Avoided)	Total loss due to direct flame impingement against building. Loss of life during evacuation, and directly putting first responders at risk during suppression activities.
Timeline:	Ongoing – weeds continuously grow
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District	
Hazard Addressed:	Wildfire	
Mitigation Action/Project Title:	Section 7.1 1D1 Improvement to roadside chipping areas	
Background/Issue:	Currently our local fire safe council has been operating in the community providing free roadside chipping to homeowners. Funding resources have become scarce. Internal change of leadership and lack of new board members have gaps in staff	
Ideas for Integration:	Alpine has created in association with Firewise USA. A non-profit group to help promote education and outreach to the community members. Goal is to continue to the roadside chipping with Firewise or replace missing members in the local fire safe council	
Responsible Agency:	Alpine Fire	
Partners:	Greater Alpine Fire Safe Council, Firewise USA, Greater San Diego Fire Safe Council	
Potential Funding:	SPFMG for community protection grants and DSAP Defensible space assistance program	
Cost Estimate:	\$150,000 roadside chipping, \$50,000 DSAP	
Benefits: (Losses Avoided)	Homeowners conduct the labor work to cut and stack piles along the roadway for zone chipping. Loss of this services would result in added additional cost shouldered to homeowners causing the homeowners to not participate	
Timeline:	Ongoing	
Priority:	HIGH	
Worksheet Completed by:	Jason McBroom Fire Marshal	

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 1E1 Improve overall score on ISO from Class 4 to Class 2 possibly Class 1
Background/Issue:	Grading score for ISO for public agencies conducted on a schedule 5 years. Levels of grading for receiving alarms, water delivery, training personnel, Community Risk Education, suppression. Lowering the overall score raises benefits to community. At 2018 score was at low level Class 2. In process currently to lower score. Goal is to achieve Class 1.
Ideas for Integration:	Continue to add community outreach and public attendance to training. Service public fire hydrants, maintain detailed accounts of training, inspections and overall fire responses to fires.
Responsible Agency:	Alpine Fire
Partners:	Alpine Fire
Potential Funding:	Internal funding general fund
Cost Estimate:	Annual operating budget plus reserves varies each year
Benefits: (Losses Avoided)	Loss potential is against the homeowners. Higher Class scores increases overall fire risk and higher insurance premiums
Timeline:	Ongoing. Visited annual and 5 year review
Priority:	Medium
Worksheet Completed by:	Jason McBroom Fire Marshal

Alpine Fire Protection District
Wildfire
Section 7.1 1F1 MOUT between Padre Water and Alpine Fire for annual maintenance of fire hydrants
For decades the municipal water district serviced all fire hydrants in Alpine. On a cycle of 10 years. In order to receive top score for the ISO ALL fire hydrants shall be inspected annually. Alpine fire took over annual maintenance through a MOU to operate and inspect all fire hydrants. Local water agency provides materials for repairs.
Create a platform to report findings. Use of ArcGIS mapping app to record all tasks for inspection.
Alpine Fire
Padre Water District
Padre Water covers the costs and maintenance of the app and license
None
Increase productivity with local fire fighters conducting the inspections. More frequent inspections being performed.
Ongoing annual basis
Medium
Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Wildfire
Mitigation Action/Project Title:	Section 7.1 2A1 Emergency Power Systems at evacuation locations
Background/Issue:	Our local schools have been labeled relocation centers and emergency shelters during emergencies or evacuations. It was found out during an evacuation that the emergency power systems failed to operate. This caused an immediate response from school to have to repair the systems
Ideas for Integration:	Maintain proper maintenance of emergency power systems inside of relocation centers. Evacuations may occur at anytime, must be prepared for such occurrence.
Responsible Agency:	Alpine Fire
Partners:	Alpine Union Elementary School District, County of San Diego Library
Potential Funding:	School district direct funds
Cost Estimate:	\$5000 - \$10,000
Benefits: (Losses Avoided)	If unable to have emergency power to run evacuation centers unable to shelter in place during evacuations. Relocating hundreds of evacuees to other outside areas. Benefit is being able to have multiple points for residents to immediate access at times of emergency.
Timeline:	Ongoing.
Priority:	Medium
Worksheet Completed by:	Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District	
Hazard Addressed:	Wildfire	
Mitigation Action/Project Title:	Section 7.1 2B1 Clean watersheds of ladder fuels adjacent to populated areas	
Background/Issue:	Creeks and watershed when not maintained act as fire wicks. Carrying dense heavy fuels to heavily populated areas. Identifying these areas are high priority. The West Fire 7-8-2018 was a prime example of how this fire event carries forward rate of spread much quicker than if fuel modified.	
Ideas for Integration:	Identify those target areas that have populated areas. Work with local homeowners on what their responsibilities are. Educate public, bring in local fire safe council and Firewise USA to help provide resources to homeowners.	
Responsible Agency:	Alpine Fire	
Partners:	Greater Alpine Fire Safe Council, Firewise USA,	
Potential Funding:	Sunrise Powerlink Grants	
Cost Estimate:	\$50,000 - \$100,000	
Benefits: (Losses Avoided)	Reducing potential for forward rate of spread to allow time for first responder to suppress during initial attack. Limbing up lower hanging ladder fuels in the creeks break apart the continuous fuels from surface fires into the tree canopies.	
Timeline:	Ongoing	
Priority:	HIGH	
Worksheet Completed by:	Jason McBroom Fire Marshal	

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Drought
Mitigation Action/Project Title:	Conduct study to identify strategies to reduce dependence upon imported water and enhance sourcing of local water.
Background/Issue:	Due to the local area on going drought has plagued the affected area. Less annual rain fall has caused natural vegetation to become drought stricken. Fuel moisture content measured through the USFS Descanso Fire Station every other Sunday shows that during dry season fuel moisture content on old fuel is critically low. New fuel growth is steadily behind.
Ideas for Integration:	Monitor closely the moisture contents from data gathered from local agencies. Partnering with neighboring agencies like Viejas Tribal Government, USFS Descanso Fire and Cal Fire to educate homeowners when appropriate times are to conduct outdoor activities. Reduce the potential for outdoor ignitions. Issue and follow red flag days, critical low moisture and metal blades during these events could cause for potential starts.
Responsible Agency:	Alpine Fire
Partners:	SDGE, USFS, Viejas Fire, Cal Fire
Potential Funding:	SDGE has weather machines positioned to measure humidity, USFS conducts fuels measurements. No potential additional funding sought.
Cost Estimate:	N/A
Benefits: (Losses Avoided)	Providing public education outreach to assist homeowners and landowners of when to conduct outdoor fuels reduction activities will reduce potential fire starts. The benefits of this is to raise overall awareness to the public, reduce potential ignitions and lower risk of initial fire attack on red flag days and wind events
Timeline:	Ongoing
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal

Jurisdiction:	Alpine Fire Protection District
Hazard Addressed:	Extreme Heat
Mitigation Action/Project Title:	Continue to inform staff of heat illness prevention program at staff meetings and company newsletters. Transition fleet to electric vehicles to reduce greenhouse gas emissions.
Background/Issue:	Local water managers also report that higher temperatures could lead to increased demand for water for irrigation. Water shortages could become more frequent and more severe in the future, straining the local economy. The potential for drought in San Diego is high.
Ideas for Integration:	On March 28, 2022, the Governor prompted local water suppliers, at the local level, to move to Level 2 of their Water Shortage Contingency Plans, which "requires locally appropriate actions that will conserve water across all sectors, and he directed the State Water Resources Control Board to consider a ban decorative watering at businesses and institutions. Although key improvements have been made since 2016, California is still experiencing drought conditions
Responsible Agency:	Alpine Fire
Partners:	County of San Diego, local water purveyors
Potential Funding:	Unknown
Cost Estimate:	Unknown
Benefits: (Losses Avoided)	Public awareness and overall public outreach to identify those in an affected area. Mitigate possible threats and or identify.
Timeline:	Ongoing
Priority:	HIGH
Worksheet Completed by:	Jason McBroom Fire Marshal

Hazard Mitigation Plan maintenance is the process the planning team establishes to track the plan's implementation progress and to inform the plan update. The plan must include a description of the method and schedule for monitoring, evaluating, and updating it within a 5-year cycle. These procedures help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program in your community.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into community officials' daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

Hazard Mitigation Plan updates provide the opportunity to consider how well the procedures established in the previously approved plan worked and revise them as needed. This annex is part of the most recent *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* update. The plan was last updated in 2018. See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* for more information.

7.1. Mitigation Action Progress

Plan monitoring means tracking the implementation of the plan over time. The plan must identify how, when, and by whom the plan will be monitored.

Annual education workshops are held at local events like the Alpine Woman's Club,
Alpine Fire Open House and guest speaking at special groups. The 3 P's of fire safety are
practiced. Education, Engineering and Enforcement. Alpine Fire works with partner
agencies and support groups to conduct public outreach events. Emails, face to face
contact and making efforts to contact new homeowners when moving into the fire
district.

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1A.1 Create fuel breaks in district	
Responsible Agency	AFPD, GAFSC, Cal Fire, BCLT	
Contact Name	Jason McBroom	
Contact Phone/Email	jmcbroom@alpinefire.org; 619-445-2635	
Project Status	 Project completed Project canceled Project on schedule Anticipated completion date: 2023/2024 Project delayed Explain 	

- What was accomplished for this project during this reporting period?
 GAFSC has completed Wrights Field FB, Eltinge FB, Star Valley FB and Via Dieguenos. Maintenance of these are expected to 2023/2024
- What obstacles, problems, or delays did the project encounter? Federal Bird Act, burning piles that have been cut after work.
- If uncompleted, is the project still relevant? Should the project be changed or revised? Several areas still remain to connect open spaces between fuel breaks. Private land and public land. Scenic View area and Sunset Vista
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1B.1 Weed Abatement / Brush Management	
Responsible Agency	AFPD, GAFSC, DPW, Cal Trans	
Contact Name	Jason McBroom	
Contact Phone/Email	jmcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed	
	• Project canceled	
	• Project on schedule : Project is on schedule • Anticipated completion date:	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? 30' brush clearing along arterial means of egress identified in Evacuation Plans. Tavern Road, Alpine Blvd, Victoria Drive, South Grade Road. All other tributary means of egress are 20' wide fuels reduction. County Roads has new language to help assist in fuels reduction and management.
- What obstacles, problems, or delays did the project encounter?

 Grant funds to help assist with homeowners maintaining required clearances along edges of roadway.

 FEMA grant to help with Alpine Creek Fuel Reduction has been delayed due to Covid.
- If uncompleted, is the project still relevant? Should the project be changed or revised? All parties are actively pursuing grant funds to assist in fuel reduction.
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1B.2 Brush Clearing along egress corridors	
Responsible Agency	AFPD, GAFSC, DPW, Cal Trans	
Contact Name	Jason McBroom	
Contact Phone/Email	jmcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed	
	• Project canceled	
	 Project on schedule : Project is on schedule Anticipated completion date: 	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? 30' brush clearing along arterial means of egress identified in Evacuation Plans. Tavern Road, Alpine Blvd, Victoria Drive, South Grade Road. All other tributary means of egress are 20' wide fuels reduction. County Roads has new language to help assist in fuels reduction and management.
- What obstacles, problems, or delays did the project encounter? Private lands and willing participation of private homeowners. Not all residents are able to actively work on their land due to financial limitations,
- If uncompleted, is the project still relevant? Should the project be changed or revised?

 Arranging so County roads crews can help homeowners mow and maintain the full width of right of way along egress corridors.
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1C.1 100':150' Defensible space to structure	
Responsible Agency	AFPD	
Contact Name	Jason McBroom	
Contact Phone/Email	imcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed: This has been completed and accomplished through Defensible Space Ordinance	
	Project canceled	
	 Project on schedule : Project is on schedule Anticipated completion date: 	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? Included new language that will allow more restrictive distance for brush clearing from 100' to 150' to structures. Passed and approved by AFPD Board of Directors 2016.
- What obstacles, problems, or delays did the project encounter? *Homeowners changing hands in sales.*
- If uncompleted, is the project still relevant? Should the project be changed or revised? Project goal has been completed.
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1D.1 Improvements to roadside Chipping Program	
Responsible Agency	AFPD, GAFSC	
Contact Name	Jason McBroom	
Contact Phone/Email	jmcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed	
	• Project canceled	
	 Project on schedule : Project is on schedule Anticipated completion date: 	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? Assist in providing resources to homeowners for free roadside chipping program. Provide educational literature and outreach to educate homeowners on the benefits of chipping. This provides a resource for them to use a program that will come through four times per year.
- What obstacles, problems, or delays did the project encounter? Funding is solely provided through Sunrise Powerlink Fire Mitigation Grants. Willingness of homeowner to sign up, filling in holes of those that have not taken active roles in maintaining clearances.
- If uncompleted, is the project still relevant? Should the project be changed or revised?

 All parties are actively pursuing assist in fuel reduction.
- Other comments
 Long term funding and down equipment may or has caused delays.

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1E.1 Improve ISO Class Rating from 4 to a 2	
Responsible Agency	AFPD	
Contact Name	Jason McBroom	
Contact Phone/Email	jmcbroom@alpinefire.org 619-445-2635	
Project Status	 Project completed: May 2016 Class 4 to Cla Project canceled 	ss 2
	Project on schedule : Currently underway pu Anticipated completion date:	ursuing Class 1 rating
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? *Improve over all score rating from Class 2 to Class 1 risk score rating.*
- What obstacles, problems, or delays did the project encounter? *Grading occurs every 5 years. We* can request new grading as projects are completed and or improvements are made.
- If uncompleted, is the project still relevant? Should the project be changed or revised?
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	1F.1 MOU Padre Water District	
Responsible Agency	AFPD, Padre Water District	
Contact Name	Jason McBroom	
Contact Phone/Email	imcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed • Project canceled	
	Project on schedule : Project is on schedule Anticipated completion date:	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? Signed a new MOU between water district and fire district to maintain all fire hydrants in the Alpine Fire Protection District fire area.
- What obstacles, problems, or delays did the project encounter? *Fire season and crews being sent out on assignment*,
- If uncompleted, is the project still relevant? Should the project be changed or revised? Looking to fill with squad and have dedicated personnel to dedicate annually.
- Other comments

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	2A.1 Emergency Power Systems at locations for evacuations	
Responsible Agency	AFPD, Alpine School District, County Library	
Contact Name	Jason McBroom	
Contact Phone/Email	imcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed	
	• Project canceled	
	Project on schedule : Project is on schedule Anticipated completion date:	
	• Project delayed Explain	

Summary of Project Progress for this Report Period

- What was accomplished for this project during this reporting period? Alpine School District has been successful in replacing Emergency Battery systems at Joan MacQueen Middle School and Boulder Oaks Elementary School. These systems provide emergency back up to school during power shutdowns.
- What obstacles, problems, or delays did the project encounter? Funding. These systems require many battery packs and ordering. Materials to replace on existing systems are back ordered or not made. Requires full replacement.
- If uncompleted, is the project still relevant? Should the project be changed or revised?
- Other comments

The County Library has an emergency point of connection to plug in an emergency power generator.

Progress Report Period	From Date: Ongoing	To Date:
Action/Project Title	2B Clean watersheds	
Responsible Agency	USDFW, GAFSC, BCLT and AFPD	
Contact Name	Jason McBroom	
Contact Phone/Email	imcbroom@alpinefire.org 619-445-2635	
Project Status	• Project completed • Project canceled	
	Project canceled Project on schedule : Project is on schedule Anticipated completion date:	
	• Project delayed Explain	

- What was accomplished for this project during this reporting period? Submitted a FEMA grant to clean watershed in Alpine Creek. This project will reduce combustible fuels adjacent to many multifamily apartments, fire station and commercial buildings. The area has not had fuels reduction since 1970 Laguna Fire. Dense overgrowth and dead tree mortality.
- What obstacles, problems, or delays did the project encounter? The grant process stalled as a result of Covid. FEMA had major fires occur over last years in northern California. Project is still moving forward.
- If uncompleted, is the project still relevant? Should the project be changed or revised?
- Other comments

7.2. Plan Update Evaluation

Plan Section	Considerations	Explanation
Planning Process	Should new jurisdictions and/or districts be invited to participate in future plan updates?	Yes. Planning consistently. New team members replace old ones that did not participate.
	Have any internal or external agencies been invaluable to the mitigation strategy?	We lean on all stakeholders for support to complete projects. Many of them are internal. Those external are keys to a successful program.
	Can any procedures (e.g., meeting announcements, plan updates) be done differently or more efficiently?	The use of the shared drive allows us to upload easily. I appreciate that.
	Has the Planning Team undertaken any public outreach activities?	NO
	improved?	Reach out to local planning groups and have an item to be posted on agenda advising that grant program is up for update
	Have there been any changes in public support and/or decision- maker priorities related to hazard mitigation?	NO
Capability Assessment	Have jurisdictions adopted new policies, plans, regulations, or reports that could be incorporated into this plan?	Not for us here in Alpine.
	Are there different or additional administrative, human, technical, and financial resources available for mitigation planning?	NO
	Are there different or new education and outreach programs and resources available for mitigation activities?	NO
	Has NFIP participation changed in the participating jurisdictions?	NO
Risk	Has a natural and/or technical or human-caused disaster occurred?	COVID! 2020 Valley Fire, 2018 West Fire, both of these prompted evacuations.
Assessment	Should the list of hazards addressed in the plan be modified?	NO

additional maps and studies available? If so, what are they and what have they	GIS layering maps. If there was one spot to go to and filter on or off layers for geographical areas to see data. General access portal for users with log in. Those that patriciate in program.
Do any new critical facilities or infrastructure need to be added to the asset lists?	NO
Have any changes in development trends occurred that could create additional risks?	NO
Are there repetitive losses and/or severe repetitive losses to document?	NO

TABLE 14: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 7.2 DATA.

Plan Section	Considerations	Explanation
Mitigation Strategy	Is the mitigation strategy being implemented as anticipated? Were the cost and timeline estimates accurate?	YES
	Should new mitigation actions be added to the Action Plan? Should existing mitigation actions be revised or eliminated from the plan?	NO
	anticipated in the plan that will need to	Not being able to meet in person does have a downfall. There are upsides to sharepoint but also down sides. In person room and face to face interaction is stronger.
	Are there new funding sources to consider?	NO
	Have elements of the plan been incorporated into other planning mechanisms?	I use this plan across our strategic plan and ISO.
Plan	Was the plan monitored and evaluated as anticipated?	Yes
Maintenance Procedures	procedures?	Good flow and constant communication.

TABLE 15: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 7.2 DATA CONTINUED

7.3 Incorporation into Existing Planning Mechanisms

The Alpine Fire Protection District operates under the County of San Diego's existing planning mechanisms. Another important implementation mechanism that is highly effective and low-cost is incorporation of the 2023 Hazard Mitigation Plan updates into other County plans and operations, where appropriate and feasible. Where possible, the existing plans and/or programs to implement hazard mitigation actions. As previously stated in Section 7.1, the County already implements policies and programs to reduce losses to life and property from hazards. The 2023 Plan update builds upon the momentum developed through previous County planning efforts and mitigation programs and recommends implementing actions, where possible, through these other plans and programs. These existing plans and programs include:

- County General Plan and Safety Element
- County Emergency Operations Plan
- County Climate Action Plan
- Alpine Planning Group
- Community Wildfire Protection Plan

The County of San Diego involved in implementing these plans and programs will be responsible for integrating the findings and recommendations of this 2023 Plan update into those documents and programs, as appropriate. As described in Section 7.1, incorporation into existing plans will be done through the routine actions of:

- Monitoring other planning/program items going before the County
- Attending other planning/program meetings;
- Participating in Executive Team meetings; and

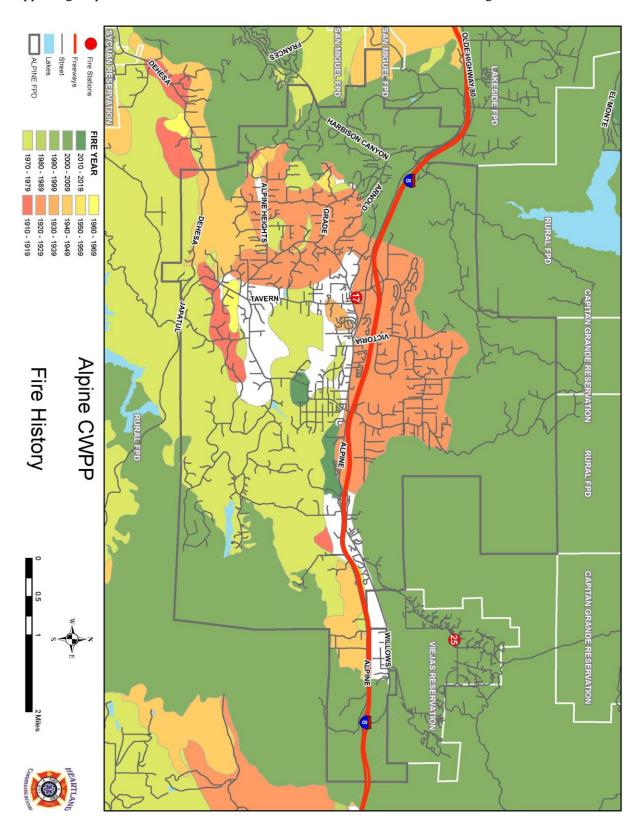
The successful implementation of this mitigation strategy will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community. For example, the County will consider incorporating the 2023 Plan update into the County's Safety Element of the County Plan, as recommended by Assembly Bill 2140.

Efforts should continuously be made to monitor the progress of mitigation actions implemented through these other planning mechanisms and, where appropriate, their priority actions should be incorporated into updates of this hazard mitigation plan.

For future development and coordination these plans shall be monitored and updated as new developments occur. Planning updates are merged into larger programs through County staff. County General Plan updates are required as part of CEQA guidance documents. Housing and Safety plans are required to be updated, including updates to the Very High Fire Hazard Severity maps. Alpine Fire as a special fire district covers all State Responsibility Area (SRA) and neighboring agencies, including Lakeside Fire and tribal lands adjacent to the region and U.S. Forest Service, Federal Responsibility Area (FRA) land to the east. As per AB 1409 (2021) Government Code Section 65302.15(a) LHMP shall be updated.

APPENDICES

Supporting maps of fire district and fire threat. Direct fire threat is related to drought.



APPENDICES

